

211649E

**Translation of the Reason for Rejection**

Drafting Date: April 30, 2009

Dispatch Date: May 13, 2009

(Reasons:)

- I. The present application does not satisfy the provision of Article 37 of the Patent Law in the following points.
- II. The present application does not satisfy the provision of Article 36(6) (i) of the Patent Law in the following points.
- III. The present application does not satisfy the provision of Article 36(6) (ii) of the Patent Law in the following points.
- IV. The present application does not satisfy the provision of Article 36(4) of the Patent Law in the following points.
- V. The invention according to the below-indicated claims cannot be patented, since it does not satisfy the requirements stipulated in Article 29(1) (iii) of the Patent Law.
- VI. The invention according to the below-indicated claims cannot

be patented in accordance with the provision of Article 29(2) of the Patent Law, since it is obvious on the basis of the disclosure of the following prior publications.

(Citations:)

1. WO 03/065464 <sup>in CPl extract</sup>  
<sup>vgl. EP 1700 183</sup>  
(See the final paragraph on page 4, lines 1 - 2 on page 8, lines 3 - 4 on page 10, the bottom line on page 25, 2<sup>nd</sup> paragraph on page 30, 2<sup>nd</sup>, 3<sup>rd</sup> paragraphs on page 33, the last paragraph on page 34, lines 13 - 15 on page 46 and Figs. 4C, 12D) <sup>[0023] [0024] [0025] [0026] [0027] [0028] [0029] [0030] [0031] [0032] [0033] [0034] [0035] [0036] [0037] [0038] [0039] [0040]</sup>
2. WO 01/41225 ✓  
(See Fig. 3)
3. JP Pat. Appln. Discl. No. 10-4209 <sup>in CPl extract</sup>  
<sup>vgl. US 5,779, 924</sup>  
(See [0026] - [0027]) <sup>col. 6, l. 25-65</sup>
4. JP Pat. Appln. Discl. No. 2000-196152 ✓  
(See Fig. 3)
5. JP Pat. Appln. Discl. No. 2000-174339 <sup>in CPl extract</sup>  
(See Fig. 1)
6. I. Schnitzer et al., 30% external quantum efficiency from surface textured, thin-film light-emitting diodes, Appl. Phys. Lett., US, American Institute of Physics, October 18, 1993, Vol. 63/Issue 16, pages 2174 - 2176 ✓

(Examiner's Note:)

As explained in Reason V below, Claims 1 - 4, 11, 12, 15, 16,

18, 34, 35 and 37 - 41 have no novelty. Therefore, among Claims 1 - 41, it is impossible to define the common "new matter corresponding to the problem to be solved" and the common "technical problem to be solved by an invention, which is unsolved at the time of filing of the application."

(Attention should be paid to: "The main part of a matter described in a claim" is "a new matter corresponding to a problem to be solved." "The problem to be solved" is "a technical problem to be solved by an invention, which is unsolved at the time of filing of the application." For the details, see the section entitled "Requirement for Unity of Application" of the "Examination Guidelines"

([http://www.jpo.go.jp/shiryou/kiyun/kiyun2/pdf/tjkiyun\\_i-2-old.pdf](http://www.jpo.go.jp/shiryou/kiyun/kiyun2/pdf/tjkiyun_i-2-old.pdf)).

Since the present application violates the provision of Article 37 of the Patent Law, Claims 19 - 33 are not examined with respect to the requirement other than the one in the Patent Law.

(It is judged that it is effective to examine Claims 5 - 10, 13, 14, 17 and 36 together with Claims 1 - 4, 11, 12, 15, 16, 18, 34, 35 and 37 - 41. Therefore, the examination is carried out from the viewpoint of the requirement of Article 37 of the Patent Law.)

If a written argument is submitted, it should be explained therein

which claim refers to the specific invention and why additional claims claiming other specific inventions satisfy Article 37 of the Patent Law with their respective relations.

Concerning Claims 1 - 18:

Reasons: II - IV

- (1) Although with reference to the detailed description, claims 1 - 8, 11 and 12 cannot be clearly excluded from the scope of the invention mentioned in the publication according to the (Citation 6).

Thus, the technical significance of Claims 1 - 8, 11 and 12 is not clear, and it cannot be recognized that the problem stated in the detailed description of the invention can be solved thereby.

- (2) In Claims 4 and 6, the descriptions "Pyramidenstümpfen" and "Kugelsegmenten" are not clear.
- (3) The description "etwa" in Claims 7, 8, 10, 11 and 12 is not clear.

Concerning Claims 1 - 4, 11, 12, 15, 16, 18, 34, 35 and 37 - 41:

Reasons: V and VI

Citation 1 states that: a first electrode being an ohmic electrode and reflecting light from a light emitting layer is formed on the undersurface of a semiconductor layered body including an active layer; a conductor layer and a supportive substrate are provided under the first electrode; recesses and projections are formed in the exposed surface of the upper semiconductor layer; the depth of the recess is 1.5  $\mu\text{m}$  and the width of the projection is 3  $\mu\text{m}$ ; a protective film with recesses and projections is coated on the semiconductor layered body and an upper surface of a metal mesh second electrode; the lateral sectional shape of the recess and the projection is a trapezoid; and plural kinds of GaN-based semiconductor layers are epitaxial-grown.

Concerning Claims 5 - 10, 13, 14, 17 and 36:

Reason: VI

The points defined in the above claims are the mere optimization of shape, which can be properly realized by a person skilled in the art in order to enhance the efficiency of extracting light. (Citation 1 discloses the feature of making the shape of the section of the recesses and the projections of the protective film triangular. If necessary, see Citations 2 and 3.)

(Claims 13 and 14:)

The points defined in the above claims are mere matters of design variation to a person skilled in the art.

(Claims 17 and 36:)

It is known to cover the upper surface of the semiconductor layer with the light transmitting electrode, and provide the light transmitting electrode with the recesses and the projections (see e.g. Citations 4 and 5).

Concerning Claims 1 - 8, 11 and 12:

Reasons: V and VI

It is impossible to clearly distinguish the above claims from Citation 6.

Concerning Claims 9 and 13 - 18:

Reason: VI

The above argument also applies for said claims since Citation 6 is the main citation.

(Suggestions on Amendments)

- (1) If the specification is amended, the amended part should be underlined.
- (2) An amendment must be made within the scope of the original specification and drawings under the present application, and

the matters being self-evident from the original specification and drawings.

("Themattersbeingself-evidentfromtheoriginalspecification and drawings" must be the matters whose meanings are evident to a person skilled in the art referring to them even if they are not stated in the original specification, etc. on the basis of the technical common knowledge at the time of filing of the application, so that he/she can understand that these matters are almost described there.)

- (3) If the amendment is to be made, the reasons for stating that the amendments to the respective matters are lawful should be stated in the written argument, by clearly presenting the descriptions as the grounds in the original specification, etc. (See the Examination Guidelines III-1-7; [http://www.jpo.go.jp/shiryou/kijun/kijun2/pdf/tjkijun iii. pdf](http://www.jpo.go.jp/shiryou/kijun/kijun2/pdf/tjkijun_iii.pdf) )